

## हिन्दुस्तान पेट्रोलियम कॉपोरेशन लिमिटेड Hindustan Petroleum Corporation Limited Future full of energy

(A Government of India Enterprise) Regd. Office: 17, Jamshedji Tata Road, Mumbai - 400020.

### **Invites Senior R&D Professionals**

Hindustan Petroleum Corporation Ltd., is a mega integrated Oil refining and marketing company with Gross Sales of ₹1,88,131 Crores and 267th position in the prestigious list of Fortune Global 500 Companies during 2011-12. HPCL accounts for about 19.96% of the market share and also operates the largest Lube Refinery in India producing Lube Base Oils of international standards, which accounts for over 40% of the India's total Lube Base Oil production.

HPCL with its performance oriented culture and well-rounded peoples' policies has won several prestigious awards like the "Forecourt Retailer of the Year" Award 2011, by Star Retailer Awards, "Golden Peacock HR Excellence Award" for the year 2011, the "CIO 100" Award by IDG, for the seventh consecutive year for innovation use of IT to deliver value and many others.

With growing market competition & increased complexity of the refineries to produce lighter, greener and value added products from heavier crude oils and validate latest technologies in the existing refineries, HPCL has ambitious plans to establish and expand a strong R&D base to provide much desired technical leverage.

HPCL has taken up various R&D initiatives & projects in line with its strategic business plans. The major activities initiated by HPCL include setting-up World class R&D Centre at Bangalore and undertaking collaborative projects with national/international organizations & institutions in fundamental as well as novel research areas. Being an environment conscious organization, HPCL also intends to widen its current scope by producing Alternative Fuels.

In our endeavor to build a knowledge-based Team for achieving excellence in R&D, we are looking for Highly Experienced Professionals with outstanding track record, as per the details below.

1.	Position	: Dy.General Manager –Petro Engineering

No. of position/s: 1 (One)Upper Age Limit: 52 years.

Essential Qualification	h : PhD or M.Tech in Chemical Engineering. Excellent academic record with minimum 60 % marks in Graduation as well as in Post- Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech in relevant branch of engineering.
Experience	<ul> <li>: - 16 years of relevant experience.</li> <li>2 years relaxation for Phd holder.</li> <li>- Research Experience has to be in the <u>relevant specialized area.</u> Research work carried out during course of acquiring Ph.D will not be considered as work experience.</li> </ul>
Job Profile	<ul> <li>Identify the potential research areas in the refinery processes and supervising the research activities.</li> <li>Associate in identifying the R &amp; D requirements and pilot plant set ups and execute for the establishment.</li> <li>To interact and coordinate research activities with internal and external customers and other relevant agencies for the collaborative R &amp; D projects.</li> <li>Effectively manage the functions of departments / divisions under his/her control.</li> <li>Officer shall report to GM- Process Technologies(Petroengineering, Quality Testing &amp; Maintenance and Tribochemistry).</li> </ul>
<b>2. Position</b> No. of position/s	<ul> <li>Senior /Chief Manager-Modelling &amp; Simulation.</li> <li>1 (One)</li> </ul>
Upper Age Limit	: $45/50$ years.
Essential Qualification	: Ph.D or M.Tech in Chemical Engineering. Excellent academic record with minimum 60 % marks in Graduation as well as in Post- Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech in relevant branch of engineering.
Experience	<ul> <li>12 years of relevant experience for SI Gr.E and 15 years for SI Gr.F.</li> <li>2 years relaxation for Phd holder.</li> <li>Research Experience has to be in the <u>relevant specialized area</u>. Research work carried out during course of acquiring Ph.D will not be considered as work experience.</li> </ul>
Job Profile	<ul> <li>Execution of Modeling and simulation for the real life processes and providing inputs for the development of the processes.</li> <li>Associate in establishing the required facilities for modeling &amp; simulations at HPCL's corporate R&amp;D Centre.</li> <li>Associate in supervising the research activities in down stream petroleum area of direct interest to HPCL's operating divisions.</li> <li>Effectively manage functions of the departments / division under his / her control.</li> <li>Officer shall report to Dy. General Manager - Petro Engineering</li> </ul>

3.	Position : Ser	nior/Chief Manager – FCC.
	No. of position/s	: 1 (One)
	Upper Age Limit	: <u>45/50 years</u> .
	Essential Qualification	n : Ph.D or M.Tech in Chemical Engineering. Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech in relevant branch of engineering.
	-	: 12 years of relevant experience for SI Gr.E and 15 years for SI Gr.F. 2 years relaxation for Ph.D holder.
		- Research Experience has to be in the <u>relevant specialized area</u> . Research work carried out during course of acquiring Ph.D will not be considered as work experience.
	Job Profile	<ul> <li>Identify and supervise research activities in downstream area related to refinery processes up-gradation, in particular FCC.</li> <li>Associate in execution of required facilities for pilot plants set up at the HPCL's corporate R &amp; D Centre.</li> <li>To interact and coordinate research activities with internal and external customers and other relevant agencies.</li> <li>Effectively manage the functions of departments / division under his/her control and take sole responsibility for the operations in his/her areas of work.</li> <li>Officer shall report to Deputy General Manager - Petro Engineering.</li> </ul>
4.	Position	: Senior/Chief Manager – Crude Evaluation.
	No. of position/s	: 1 (One)
	Upper Age Limit	: <u>45/50 years</u> .
	Essential Qualification	: Ph.D or M.Tech in Chemical Engineering. Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech in relevant branch of engineering.
	Experience	<ul> <li>: 12 years of relevant experience for SI Gr.E and 15 years for SI Gr.F.</li> <li>2 years relaxation for Ph.D holder.</li> <li>- Research Experience has to be in the <u>relevant specialized area</u>. Research work carried out during course of acquiring Ph.D will not be considered as work experience.</li> </ul>
	Job Profile	: - Identify and direct research in downstream area related to refinery processes, particularly in the area of detailed crude evaluation, crude compatibility, crude distillation, liquid-liquid extraction.

		<ul> <li>Direct research leading to improvement in distillate/ lube oil yields, new methods to predict computability, new additives for enhancing crude compatibility and reducing the pre-heat fouling, methods for handling high TAN crudes.</li> <li>Prepare research project proposals and provide guidance to researchers for delivering desired results.</li> <li>Execution of required facilities for crude evaluation lab at the R &amp; D Centre.</li> <li>Interact and coordinate research activities with internal and external customers and other relevant agencies and undertake collaborative research programs.</li> <li>Effectively manage the functions of departments / division under his/her control and take sole responsibility for the operations in the area of research work.</li> </ul>
5.	Position	: Senior/Chief Manager – Analytical
	No. of position/s	: 1 (One)
	Upper Age Limit	: <u>45/50 years</u> .
	Essential Qualification	: <u>Ph.D</u> in Analytical/Organic/Physical Chemistry. Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Sc in relevant branch.
	Experience	<ul> <li>12 years of relevant experience for SI Gr.E and 15 years for SI Gr.F.</li> <li>Research Experience has to be in the <u>relevant specialized area</u>. Research work carried out during course of acquiring Ph.D will not be considered as work experience.</li> </ul>
	Job Profile	<ul> <li>Identify and direct research activities in analytical sciences area related to petroleum products, particularly employing advanced analytical techniques such as CP/MAS NMR, X-Ray techniques (XRF, SEM-EDXA), GC/LC, FT-Raman, FT-IR, UV/Visible, Elemental analysis (ICP/AES/MS) for developing new analytical methods for analysing various petroleum products, catalysts, nanomaterials and biomolecules.</li> </ul>
		- Execution of required facilities for advanced analytical equipment facilities at the R & D Centre.
		<ul> <li>Interact and coordinate research activities with internal and external customers and other relevant agencies and undertake collaborative research programs</li> <li>Prepare research project proposals and provide guidance to researchers for delivering desired results.</li> <li>Effectively manage the functions of departments / division under his/her control and take sole responsibility for the operations in the area of research work.</li> </ul>

6. Position	: Manager – Hydro-Processing.
No. of position/s	: 2 (Two)
Upper Age Limit	: <u>40 years</u> .
Essential Qualification	: Ph.D or M.Tech in Chemical Engineering. Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech in relevant branch of engineering.
Experience	<ul> <li>9 years of relevant experience.</li> <li>2 years relaxation for Ph.D holder.</li> <li>Research Experience has to be in the <u>relevant specialized area</u>. Research work carried out during course of acquiring Ph.D will not be considered as work experience.</li> </ul>
Job Profile	<ul> <li>Undertake and direct research activities in downstream area related to refinery processes up-gradation, in particular Hydroprocessing and develop protocols / methods for catalyst/additives evaluation and selection.</li> <li>Enable establishment of pilot plants &amp; other facilities for Hydroprocessing lab at the R &amp; D Centre.</li> <li>Carry out work in the Hydroprocessing pilot plants &amp; micro-reactor units with varying operating conditions and correlating with the plant process optimization for enhancing the yields.</li> <li>Interact and coordinate research activities with internal and external customers and other relevant agencies and undertake collaborative research programs.</li> <li>Monitor HPCL hydro treating units in terms of catalyst performance, regeneration and change out for suitable technical suggestions to improve performance of the units.</li> <li>Provide advanced research/technical services to the operating plants for trouble shooting.</li> <li>Effectively manage the functions of the team under his/her control and take sole responsibility for the operations in his/her areas of work.</li> </ul>
7. Position	: Manager – Catalysis.
No. of position/s	: 1 (One)
Upper Age Limit	: 40 years.
Essential Qualification	: Ph.D or M.Tech in Chemical Engineering or Ph.D in Inorganic or Physical Chemistry. Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech or M.Sc in relevant branch.

Experience	<ul> <li>9 years of relevant experience.</li> <li>2 years relaxation for Ph.D holder after M.Tech/B.Tech.</li> <li>Research Experience has to be in the <u>relevant specialized area</u>. Research work carried out during course of acquiring Ph.D will not be considered as work experience.</li> </ul>
Job Profile	<ul> <li>Undertake and direct research in downstream area related to refinery processes, particularly in the area of catalysis for developing improved/ novel catalysts.</li> <li>Prepare research project proposals and provide guidance to researchers for delivering desired results.</li> <li>Enable establishment of required facilities for Catalysis lab at the R &amp; D Centre.</li> <li>Interact and coordinate research activities with internal and external customers and other relevant agencies and undertake collaborative research programs.</li> <li>Provide advanced research/technical services to the operating plants for trouble shooting.</li> <li>Effectively manage the functions of team under his/her control and take sole responsibility for the operations in his/her areas of work</li> </ul>
8. Position	: Manager – Modeling & Simulation.
No. of position/s	: 1 (One)
Upper Age Limit	: 40 years.
Essential Qualification	: Ph.D or M.Tech in Chemical Engineering. Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech in relevant branch of engineering.
Experience	<ul> <li>: 9 years of relevant experience.</li> <li>2 years relaxation for Ph.D holder.</li> <li>Research Experience has to be in the relevant specialized area.</li> <li>Research work carried out during course of acquiring Ph.D will not be considered as work experience.</li> </ul>
Job Profile	<ul> <li>: - Undertake and direct research activities in the areas of process modeling for various refinery units such as FCCU, DHDT, reformer, isomerization etc.</li> <li>- Enable establishment of required facilities for modeling &amp; simulations at the R &amp; D Centre.</li> <li>- Identify and utilize suitable modeling and simulation software relevant to refinery process applications and guide engineers in the use of steady state process flow sheet simulators/models such as ASPEN PLUS, PRO II, REFSYS, HYSYS, etc.</li> </ul>

	<ul> <li>Interact and coordinate research activities with internal and external customers and other relevant agencies and undertake collaborative research programs.</li> <li>Provide advanced research/technical services to the operating plants for trouble shooting.</li> <li>Effectively manage functions of the team under his / her control and take sole responsibility for the operations in his/her areas of work.</li> </ul>
9. Position	: Manager – Crude Evaluation.
No. of position/s	: 1 (One)
Upper Age Limit	: 40 years.
Essential Qualification	: Ph.D or M.Tech in Chemical Engineering. Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech in relevant branch of engineering.
Experience	<ul> <li>9 years of relevant experience.</li> <li>2 years relaxation for Ph.D holder.</li> <li>Research Experience has to be in the relevant specialized area.</li> <li>Research work carried out during course of acquiring Ph.D will not be considered as work experience.</li> </ul>
Job Profile	<ul> <li>Undertake and direct research programs and guide the engineers/scientist in the area of crude distillation &amp; crude assay, crude blend compatibility &amp; processing of opportunity crudes and liquid-liquid extraction.</li> <li>Enable establishment of required research facilities for crude evaluation lab and fuel testing lab at the R &amp; D Centre.</li> <li>Develop new methods for the prediction of crude compatibility, crude pre-heat exchanger fouling, and undertake activities for identification/development of process chemicals along with team members.</li> <li>Identify/develop co-solvent/new solvent(s) for LLE for improving Lube base stock yields.</li> <li>Analyze data from TBP / vacuum distillation units and results from crude bled studies and provide recommendations to refineries for increase distillate yields and reduce crude pre-heat fouling.</li> <li>Interact and coordinate research activities with internal and external customers and other relevant agencies and undertake collaborative research programs.</li> <li>Effectively manage functions of the team under his / her control and take sole responsibility for the operations in his/her areas of work.</li> </ul>

in-house models.

- Develop and execute models for yield improvement, energy optimisation (pinch analysis) and work process optimization using commercial models such as Aspen plus, KBR, HYSYS and develop

10. Position	: Manager – Analytical.
No. of position/s	: 2 (Two)
Upper Age Limit	: 40 years.
Essential Qualification	: Ph.D. in Analytical/Organic/Physical Chemistry Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Sc in relevant branch.
Experience :	9 years of relevant experience. Research Experience has to be in the <u>relevant specialized area</u> . Research work carried out during course of acquiring Ph.D will not be considered as work experience.
Job Profile	<ul> <li>: - Undertake and direct research in analytical sciences area related to petroleum products, employing advanced analytical techniques such as the thermochemical spectroscopy, elemental analysis (ICP/AES/MS), x-ray spectroscopy (XRD, XRF, XPS), chromatographic techniques (HPLC and GC), etc.</li> <li>- Development of methods for analysis of petroleum products and crude &amp; other refinery samples using different analytical techniques.</li> <li>- Participate in in-house research projects and provide quality and quantitative analytical data.</li> <li>- Enable establishment of required facilities for advanced analytical equipment facilities at the R &amp; D Centre.</li> <li>- To interact and coordinate research activities with internal and external customers and other relevant agencies and undertake collaborative research programs.</li> <li>- Effectively manage functions of the team under his / her control and take sole responsibility for the operations in his/her areas of work.</li> </ul>
11. Position	: Manager – Nano Tech / Tribochemistry.
No. of position/s	: 1 (One)
Upper Age Limit	: 40 years.
Essential Qualification	: Ph.D. in Nanotechnology/Tribochemistry/Inorganic or Physical Chemistry .Excellent academic record with minimum 60 % marks in Graduation as well as in Post-Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech or M.Sc in relevant branch.
Experience :	<ul> <li>9 years of relevant experience.</li> <li>2 years relaxation for Ph.D holder after M.Tech/B.Tech.</li> <li>Research Experience has to be in the <u>relevant specialized area</u>. Research work carried out during course of acquiring Ph.D will not be considered as work experience.</li> </ul>
Job Profile	: - Undertake and direct research in the area of Nanotechnology based on latest developments in the field of Nanocatalysts, nano-structured / nano-porous materials and Nano-lubricants.

	- Enable establishment of required facilities for Nanotechnology lab for the R&D Centre.
-	Identify and carry out research projects using Nanomaterial characterization techniques such as Field Emission Scanning electron microscope, Atomic force Microscope, electron diffraction techniques, electron probe micro analysis, etc.
	- Undertake research projects in inter-disciplinary research areas and train scientists in this area.
-	Identify suitable partners from research / academic institutes for undertaking collaborative research projects and provide advanced research / technical support to the HPCL refineries.
	- Effectively manage functions of the team under his / her control and take sole responsibility for the operations in his/her areas of work.
12. Position	: Manager – Bio-Process.
No. of position/s	: 1 (One)
Upper Age Limit	: 40 years.
Essential Qualification	: Ph.D. in Biotechnology or Microbiology or M. Tech in Biotechnology .Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech or M.Sc in relevant branch.
Experience	<ul> <li>9 years of relevant experience.</li> <li>2 years relaxation for Ph.D holder after M.Tech/B.tech.</li> <li>Research Experience has to be in the <u>relevant specialized area</u>. Research work carried out during course of acquiring Ph.D will not be considered as work experience.</li> </ul>
Job Profile	: - Undertake and direct research in the areas of application of Bioprocesses to the refinery processes / development biocatalysts / biofuels.
	- Enable establishment of facilities for the Bioprocesses lab at the R&D Centre.
	- Guide in operating state-of-art laboratory scale fermenter systems and translating the lab scale fermentation process to pilot plant scale for the production of biofuels.
	- Identify and undertake research projects in the area of ETP through membrane separation process in industrial scale for improving ETP plants performance at HPCL refineries.

	<ul> <li>To interact and coordinate research activities with internal and external customers and other relevant agencies and undertake collaborative research programs.</li> <li>Effectively manage functions of the team under his / her control and take sole responsibility for the operations in his/her areas of work.</li> </ul>
13. Position	: Senior Research Officer/Deputy-Manager – FCC.
No. of position/s	: 1 (One)
Upper Age Limit	: 35 years.
Essential Qualification	: Ph.D. or M. Tech in Chemical Engineering .Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech in relevant branch of engineering.
2	4 years of relevant experience for SI Gr.B and 7 years for SI Gr.C. years relaxation for Ph.D holder. Research Experience has to be in the <u>relevant specialized area</u> . Research work carried out during course of acquiring Ph.D will not be considered as work experience.
Job Profile	: - Undertake research activities in downstream area related to refinery processes up-gradation, in particular FCC.
-	- Enable establishment of pilot plants & other facilities for FCC lab at the R & D Centre.
-	Carry out work in the FCC pilot plants with varying operating conditions and correlating with the plant process optimization for enhancing the yields.
-	Coordinate research activities with internal and external customers and collaborative partners.
- N	Ionitoring of health of in-use catalyst and identify and recommend suitable catalyst for operating plants.
	apport in providing advanced research/technical services to the berating plants for trouble shooting.
14. Position	: Senior Research Officer/Deputy-Manager – Catalysis.
No. of position/s	: 1 (One)
Upper Age Limit	: 35 years.

Essential Qualification	: Ph.D. or M. Tech in Chemical Engineering or Ph.D. in Inorganic or Physical Chemistry. Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech or M.Sc in relevant branch.
Experience :	<ul> <li>4 years of relevant experience for Sl Gr.B and 7 years for Sl Gr.C.</li> <li>2 years relaxation for Ph.D holder after M.Tech/B.Tech.</li> <li>Research Experience has to be in the <u>relevant specialized area.</u> Research work carried out during course of acquiring Ph.D will not be considered as work experience.</li> </ul>
Job Profile	: - Undertake research activities in downstream area related to refinery processes, particularly in the area of catalysis.
	- Execute research projects leading to development of new catalysts and their commercialization.
	- Enable establishment of required facilities for Catalysis lab at the R & D Centre.
	- Coordinate research activities with internal and external customers and collaborative partners.
	- Carry out independent research work in refinery catalyst development and participate in development of novel catalysts.
	- Operate and maintain state of the art lab equipment including bench scale and micro-reactor facilities.
-	Support in providing advanced research/technical services to the operating plants for trouble shooting.
15. Position	: Senior Research Officer/Dy. Manager–Modeling & Simulation.
No. of position/s	: 1 (One)
Upper Age Limit	: 35 years.
Essential Qualification	: Ph.D. or M. Tech in Chemical Engineering or B. Tech with additional 2 years of experience in Process Design/Simulation & Modeling.Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech in relevant branch of engineering.
Experience	: 4 years of relevant experience for Sl Gr.B and 7 years for Sl Gr.C. 2 years relaxation for Ph.D holder. Research Experience has to be in the <u>relevant specialized area</u> . Research work carried out during course of acquiring Ph.D will not be considered as work experience.

Job Profile	- Undertake process modeling for various refinery units such as FCCU, DHDT, reformer, isomerization etc.
	- Enable establishment of required facilities for modeling & simulations at the R&D Centre.
	- Undertake research projects using modeling and simulation software and steady state process flow sheet simulators such as ASPEN PLUS, PRO II, REFSYS, etc. for building steady state refinery models.
	- Develop in-house simulation and optimization tools
	- Undertake research activities resulting in process optimization.
	- Develop and execute models for yield improvement, energy optimization (pinch analysis), etc.
	- Support in providing advanced research/technical services to the operating plants for trouble shooting through modelling and simulation studies.
16. Position	: Senior Research Officer/Deputy-Manager – Crude Evaluation.
No. of position/s	: 1 (One)
Upper Age Limit	: 35 years.
Essential Qualificat	tion : Ph.D. or M. Tech in Chemical Engineering .Excellent academic record with minimum 60 % marks in Graduation as well as in Post- Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech in relevant branch of engineering.
Experience	<ul> <li>4 years of relevant experience for SI Gr.B and 7 years for SI Gr. C.</li> <li>2 years relaxation for Ph.D holder. Research Experience has to be in the <u>relevant specialized area</u>. Research work carried out during course of acquiring Ph.D will not be considered as work experience.</li> </ul>
Job Profile	: - Undertake research projects in the area of crude distillation, crude assay and liquid-liquid extraction (LLE) processes.
	- Operate TBP / vacuum distillation units and LLE units and preparation of crude assay and other technical reports
	- Carryout research activities using crude manager, product blending software, LP modeling, PIMS to evaluate the crude assay data and for plant yield improvements, to suit to the needs of HPCL refineries.
	- Develop methods for predicting crude compatibility for processing opportunity crude blends in HPCL refineries.

	- Coordinate research activities with internal and external customers and collaborative partners.				
-	Support in providing advanced research/technical services to the operating plants for trouble shooting.				
17. Position	: Senior Research Officer/Deputy-Manager – Analytical.				
No. of position/s	: 3 (Three)				
Upper Age Limit	: 35 years.				
Essential Qualification	: Ph.D. or M.Sc in Analytical/Organic/Physical Chemistry. Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Sc in relevant branch.				
-	4 years of relevant experience for Sl Gr.B and 7 years for Sl Gr.C. Research Experience has to be in the <u>relevant specialized area</u> . Research work carried out during course of acquiring Ph.D will not be considered s work experience.				
Job Profile	: - Undertake research activities in analytical sciences area related to petroleum products, employing advanced analytical techniques such as elemental analysis (ICP/AES/MS), thermochemical spectroscopy, x-ray spectroscopy (XRD, XRF, XPS), chromatographic techniques (HPLC and GC), etc.				
	<ul> <li>Develop new methods for analysis of petroleum products and crude &amp; other refinery samples using different analytical techniques.</li> </ul>				
	- Execute in-house research projects and provide quality and quantitative analytical data.				
-	Enable establishment of required facilities for advanced analytical equipment facilities at the R & D Centre.				
	- Coordinate research activities with internal and external customers and collaborative partners.				
-	Support in providing advanced research/technical services to the operating plants for trouble shooting.				
18. Position	: Senior Research Officer/Deputy-Manager – Hydro-processing.				
No. of position/s	: 2 (Two)				
Upper Age Limit	: 35 years.				
Essential Qualification	: Ph.D. or M. Tech in Chemical Engineering .Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech in relevant branch of engineering.				

Experience	<ul> <li>4 years of relevant experience for Sl Gr.B and 7 years for Sl Gr.C.</li> <li>2 years relaxation for Ph.D holder. Research Experience has to be in the<u>relevant specialized area</u>. Research work carried out during course of acquiring Ph.D will not be considered as work experience.</li> </ul>
Job Profile	: - Undertake research activities in downstream area related to refinery processes up-gradation, in particular Hydro-processing.
	- Enable establishment of pilot plants & other facilities for Hydro- processing lab at the R & D Centre.
	- Design pilot plant experimental scheme with varied operating conditions for optimization of process parameters and undertake generation of high quality pilot plant experimental data.
	- Develop suitable trickle bed reactor model to simulate the performance of DHDS/DHDT units by incorporation of innovative mass and heat transfer and reaction engineering concepts.
	- Coordinate research activities with internal and external customers and collaborative partners.
	- Monitoring of health of in-use catalyst and identify and recommend suitable catalyst for operating plants.
	- Support in providing advanced research/technical services to the operating plan for trouble shooting.
19. Position	: Senior Research Officer/Deputy-Manager – Catalysis (Utilities).
No. of position/s	: 1 (One)
Upper Age Limit	: 35 years.
Essential Qualific	eation : Ph.D. or M. Tech in Chemical Engineering or Ph.D in Catalysis/Inorganic/Physical Chemistry . Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech or M.Sc in relevant branch.
Experience	: 4 years of relevant experience for SI Gr.B and 7 years for SI Gr.C. 2 years relaxation for Ph.D holder after M.Tech/B.Tech. Research Experience has to be in the <u>relevant specialized area</u> . Research work carried out during course of acquiring Ph.D will not be considered as work experience.
Job Profile	: - Undertake research activities related to catalyst formulations development and scale up for various refinery processes.

	- Enable establishment of required facilities for catalyst formulation development and scale up			
	- Develop formulations employing various binders such as bentonite, attatulgizte, cavelin etc.			
	- Undertake catalyst scale up the catalyst recipes from lab scale to demo scale using spray drying/extrusion/nodulization techniques.			
	- Coordinate research activities/ catalyst scale-up/ commercial production activities with internal and external customers and collaborative partners.			
	- Take up research work on catalyst regeneration to assess the regenerability of the spent catalysts such as DHDS and to improve/optimize the methods of regeneration.			
20. Position	: Deputy-Manager – Bio Fuels & Syn-Lubes.			
No. of position/s	: 1 (One)			
Upper Age Limit	: 35 years.			
Essential Qualification	on : <u>Ph.D./M.Sc. in Organic Chemistry</u> /M. Tech./Post Graduation/B. Tech (Biotechnology). Excellent academic record with minimum 60 % marks in Graduation as well as in Post-Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech or M.Sc in relevant branch.			
Experience :	5 years of relevant research experience for Ph.D, 8 years for M.Tech./M.Sc. & additional 2 years of experience for B. Tech. Research Experience has to be in <u>the relevant specialized area</u> . Research work carried out during course of acquiring Ph.D will not be considered as work experience.			
Job Profile	: - Undertake research activities in the areas of biofuels from biomass and other related areas.			
-	Enable establishment of facilities for the Bioprocesses labs.			
	- Execute scale-up activities involving state-of-art bioprocesses developed and translating the lab scale activities to pilot plant scale and full scale for the production of biofuels.			
-	Coordinate research programs in collaboration with premier academic institutes in the area of biotechnology.			
	- To assess the potential, study the use in plant and machinery and develop lubricants using synthetic base oils like group IV and V.			

21. Position	: Deputy-Manager – Instrumentation/Analysis.				
No. of position/s	: 1 (One)				
Upper Age Limit	35 years.				
Essential Qualification	n : Ph.D. in Chemistry/M.Sc. in Analytical Chemistry/M. Tech./B. Tech (Instrument Engineering) .Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech or M.Sc in relevant branch.				
Experience	<ul> <li>5 years of research experience for Ph.D, 8 years for M. Tech or</li> <li>M.Sc &amp; additional 2 years of experience for B.Tech. Research Experience has to be in the relevant specialized area. Research work carried out during course of acquiring Ph.D will not be considered as work experience.</li> </ul>				
Job Profile	: - Undertake research activities in analytical sciences area related to lubricants & other petroleum products, employing advanced analytical techniques such as elemental analysis (ICP/AES), thermochemical spectroscopy, , chromatographic techniques (HPLC and GC), etc.				
	- Develop new methods for analysis of lubricants, & other petroleur products using different analytical techniques.				
	- Execute in-house research projects and provide quality and quantitative analytical data.				
-	Enable establishment of required facilities for advanced analytical equipment facilities at the R & D Centre.				
:	- Support in providing advanced research/technical services to the SBU for trouble shooting.				
22. Position	: Deputy-Manager – Lubes, Additives & Automotive.				
No. of position/s	: 1 (One)				
Upper Age Limit	: 35 years.				
Essential Qualification	: Ph.D. in Chemistry/M.Sc. in Analytical/Organic Chemistry/M. Tech. (Instrument Engineering/Chemical).Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation. Eligibility for Ph.D holders would be Ph.D after M.Tech/B.Tech or M.Sc in relevant branch.				

: 5 years of relevant research experience for Ph.D, 8 years for M. Tech./M.Sc. Research Experience has to be in the <u>relevant</u> <u>specialized area.</u> Research work carried out during course of acquiring Ph.D will not be considered as work experience.				
: - Undertake research projects in the area of automotive lubricants.				
- Coordinate research activities with OEM,s internal and extern customers and collaborative partners				
- Carryout research activities involving evaluations of additives, competitors' products, existing products, base oils and other chemicals.				
- Will be instrumental in designing the specifications of additives, chemicals, finished products and coordinate with blending plants for release of formulations and products in the market.				
- Support in providing advanced technical literature for field staff to establish superiority of our products over competitors.				
: Deputy-Manager – Engine, Rig & Tribo Test.				
: 1 (One)				
: 35 years.				
n : M. Tech/B. Tech (Chemical Engineering/Mechanical) .Excellent academic record with minimum 60 % marks in Graduation as well as in Post Graduation.				
: 8 years of relevant research experience for M. Tech. & additional 2 years of experience for B. Tech.				
: - Undertake Job of upgradation of laboratory facility in terms of engine test facility, tribotesting rigs and simulation rigs.				
- Enable and operate required facilities for modeling & simulations at the R&D Centre.				
- Undertake research projects using modeling and simulation software for development of results correlated with field conditions.				
Develop in-house simulation and optimization tools - Support in providing advanced research/technical services to the field staff by means of literature proving superiority of our products.				

#### **Concessions/Relaxations**

- Reservation of posts for SC, ST, OBC-NC are as per applicable Government Directives.
- Wherever the candidates (belonging to General and OBC-NC category) are required to have secured minimum 60% marks in respective examinations as per the essential qualification criteria, the same is relaxed to 50% for SC/ST/PWD candidates.
- Any request for change in Category (UR/SC/ST/OBC-NC/ PWD) once filled in the online application form, will not be considered and accordingly applicable concession/relaxation will not be extended
- The reserved category candidates are required to submit the caste/ PWD certificate/s in prescribed format of Government of India, issued by the competent authority at the time of interview(as applicable for appointment to the posts under Government of India), in support of their claim. In addition, the OBC-NC (OBC-Non Creamy layer) candidates will be required to submit a valid caste certificate in the prescribed format applicable for purpose of reservation in appointment to posts under Government of India/Central Government Public Sector Undertaking as contained in DOPT Memo No. 36012/22/93-Estt.(SCT) dated 08-09-93 from a competent authority issued in the year of advertisement. Further the OBC-NC candidates will have to give a self-undertaking, at the time of Personal Interviews if called for, indicating that they belong to OBC-Non Creamy Layer.

For prescribed format of caste certificate, please visit our website www.hindustanpetroleum.com

- The OBC candidates who belong to "Creamy Layer" are not entitled for concession admissible to OBC-NC candidates and such candidates will have to indicate their category as Unreserved (UR).
- In case the SC/ST/OBC-NC/PWD certificate has been issued in a language other than English/Hindi the candidates will be required to submit a self-certified translated copy of the same either in English or Hindi.
- Maximum age limit is relaxable by 5 years for SC & ST, 3 years for OBC-NC and 10 years for PWD :UR, 13 years for PWD : OBC-NC and 15 years for PWD : SC/ST candidates, as applicable.
- Maximum age limit relaxable by 5 years for candidates domiciled in Jammu & Kashmir between 01.01.1980 and 31.12.1989.
- Age relaxation by 5 years for Ex-servicemen & Commissioned Officers (including ECOs/ SSCOs) subject to rendering minimum 5 years military service and fulfilment of other conditions prescribed by Govt. of India.

• Wherever upper age limit is mentioned as 45/50 yrs for Salary Grade E/F position it implies that upper age limit for salary Grade E & Salary Grade F is 45 & 50 years respectively (refer to position no.2,3,4 & 5).

#### **Physical Fitness**

Desirous candidates seeking employment with Hindustan Petroleum needs to be medically fit as per Hindustan Petroleum's pre-employment medical standard.

#### **SELECTION METHODOLOGY:**

Candidates fulfilling all of the above criteria (based on scrutiny of the application and resume) will be called for personal interview/interaction for assessing their technical & research aptitutde and also for assessing their behavioral competencies. Candidates shortlisted in personal interview will be required to undergo medical examination. Reference for a medical examination does not mean final selection, which may please be noted. The final selection / Offer of Employment will be based on the candidate's performance in Personal Interview, availability of vacancies in various positions advertised, being declared as Medically Fit by HPCL designated Physician and subject to fulfillment of other eligibility criteria w.r.t Academic Qualification, work experience, Age, NOC (from present Employer, in case of candidates working in a Government / Quasi-Government / Public Sector Undertaking), Relieving letter etc. as may be applicable.

#### **EMOLUMENTS AND PLACEMENTS :**

Selected candidates will be placed in pay scale mentioned below. Besides basic pay and industrial pattern of DA, other allowances include HRA, Medical facilities, Gratuity, Contributory Provident Fund, Employees Pension Scheme, LFA, Contributory Superannuation Benefit, Performance related pay etc. and other perquisites shall be applicable as per the grade and Corporations rules.

Current pay scale is given below :

Sr. No	Position	Salary grade	Salary Scale (Rs.)	CTC (Appx.)
1	Chief Manager / Deputy General Manager	F / G	51,300 - 73,000*	17.84 Lacs
2	Senior Manager	E	43,200-66,000*	15.03 Lacs
3	Manager	D	36,600 - 62,000*	12.73 Lacs
4	Deputy manager	C	32,900-58,000*	11.44 Lacs
5	Senior Officer	В	29,100-54,500*	10.12 lacs

\*Candidates selected for respective positions will be placed in the salary scale stated above. CTC is for candidates posted in metro cities; and may vary for other locations. CTC includes deferred payments like post-Retirement Benefits.

The postings are currently at Mumbai or Bangalore and the services thereafter are transferable as required by the Corporation.

#### HOW TO APPLY :

Candidates matching above criteria w.r.t qualification, experience, age etc. can apply online **through** <u>www.hindustanpetroleum.com</u>. Online submission of the application will be allowed on the website up to  $20^{\text{th}}$  December, 2012.

STEP 1: Login to www.hindustanpetroleum.com and click on Career Opportunities.

**STEP 2: Read** all the instructions given on the website.

**STEP 3:** Fill in the online form with all the relevant details.

**STEP 4:** Upload your detailed resume mentioning following details.

- Name in full,
- Date of birth,
- Gender,
- E-mail ID,
- Education qualification,
- Work experience details,
- Contact details / mailing address,
- Any other information.

**STEP 5:** Upload your passport size photograph.

**STEP 6:** Click **SUBMIT**. Take a print of the application form and affix passport size photograph (same as the one which is uploaded in online application form) and sign the form in the space provided for the same. Please preserve a copy of this application form to be produced during the selection process.

**STEP 7:** Various intimations, schedules/dates can be accessed through HPCL website. We can also be reached at <u>rndrect@hpcl.co.in</u>

# <u>Please mention correct and active e-mail ID / contact nos. for various communications. The candidates must have an active e-mail id, which must remain valid for at least next one year. All future communication with the candidates will take place through e-mail only.</u>

Interview Call letter shall be sent by only thru e-mail to the candidate's mailing address. Downloaded Interview call letter along with photograph affixed on it is required to be produced at the time of Interview. No hard copies will be mailed separately through post.

HPCL will not be responsible for any loss of email/call letter sent, due to invalid/wrong email id or any other reason.

#### **GENERAL INSTRUCTIONS:**

- Indian Nationals only need to apply.
- Reimbursement of travel fare limited to Air fare (Economy Class) for Sl Gr D and above from the airport nearest to the address mentioned in the application form to the place of interview Or AC first class rail fare for Sl. Gr D & above and AC second class rail fare for Sl. Gr.C & B from the station nearest to the address mentioned in the application form to the place of interview, within India. Please note that the date of travel should not be more than 2 days prior or after the date of interviews and reimbursement will be subject to production of the Travel Tickets/ proof of journey (both ways)".

"For Overseas Candidates who are shortlisted, depending upon the response rate, interview venue, dates and other modalities, etc. shall be communicated in due course".

- Age and Work experience will be considered as of 20<sup>th</sup> December, 2012
- All the qualifications should be full time regular course/s from a recognized Institute / University in India / Abroad.
- Depending on the requirement, the corporation reserves the right to cancel/restrict/curtail/enlarge the recruitment process, if need so arises, without any further notice and without assigning any reason thereof. The number of vacancies indicated against each position may increase or decrease as per the requirement of the Corporation.
- Candidates presently employed in Government Departments / PSU's / Autonomous Bodies have to produce NOC at the time of interview, failing which their candidature will not be entertained.
- Wherever CGPA or Letter Grade is awarded in qualifying degree, its equivalent percentage of marks must be indicated in the application as per norms adopted by University/Institute.
- **Request for change of Interview centre shall not be considered**. However HPCL reserves the right to cancel or add any centre depending on the response in that area/centre.
- HPCL reserves the right not to fill any of the above posts advertised at any stage of selection process.

All communications connected with Recruitment process would be done through e-mail only. Candidates may direct their query through e-mail to <u>rndrect@hpcl.co.in</u>

Candidates belonging to reserved categories i.e. SC/ST/OBC-NC & PWD would be assessed under relaxed standards during personal interview/interaction.

#### All the details given in the application will be treated as final and no changes will be entertained.

While applying for above post, the applicant must ensure that he/she fulfils the eligibility and other norms mentioned above, as on the specified dates and the particulars furnished are correct / complete in all respects. In case it is detected at any stage of recruitment / selection that a candidate does not fulfill the eligibility norms and / or that he/she has furnished any incorrect / false information or has suppressed any material fact(s), his/her candidature will automatically stand cancelled. If any of the above shortcoming(s) is/are detected even after appointment, his/her services are liable to be terminated without any notice.

Court of jurisdiction for any dispute will be at Mumbai.